



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Suk H. Cho et al. Art Unit : 1751
Serial No. : 09/751,047 Examiner : Preeti Kumar
Filed : December 29, 2000
Title : LIQUID AUTOMATIC DISHWASHING DETERGENT

Commissioner for Patents
Washington, D.C. 20231

DECLARATION UNDER 37 C.F.R. § 1.132 OF JAMES L. KURTZ

I, James L. Kurtz, declare as follows:

1. I am a citizen of the United States and presently live at 215 East Woodhaven Lane, Idaho Falls, ID 83404.
2. I am presently employed by Melaleuca Inc., and have been so employed since January, 1999.
3. I received a Ph.D. in Chemistry from Syracuse University, Syracuse, New York.
4. I am listed as an inventor of the above-referenced patent application.
5. I have read the above-reference patent application, the pending claims, the Ospinal *et al.* patent, and the Examiner's Office Actions mailed January 25, 2002, October 23, 2002, and March 18, 2003, including the section where the Examiner alleges that "the compositions taught by Ospinal et al. do not exclude liquid automatic dishwashing detergents from their teaching of dishwashing pastes and gels."
6. Hand dishwashing detergents are fundamentally different from liquid automatic dishwashing detergents as evidenced by the following. First, hand dishwashing detergents are used in a manner different from the manner in which liquid automatic dishwashing detergents are used. Hand dishwashing detergents are dispensed by hand

into an open bath at moderate temperature with moderate agitation provided by hand action. Liquid automatic dishwashing detergents are dispensed automatically in an enclosed chamber at high temperature with vigorous spraying action. Second, hand dishwashing detergents have properties that are different from the properties of liquid automatic dishwashing detergents. For example, stable foam is a desirable property of hand dishwashing detergents that helps prevent soil from re-depositing on dishes once they are cleaned. Stable foam is also accepted by consumers as a sign that the hand dishwashing detergent is still working to clean additional dishes. In fact, a standard efficacy test for hand dishwashing detergents is a miniplate test in which soiled glassware is repeatedly hand washed in a bath until the foam disappears. Stable foam is an undesirable property of liquid automatic dishwashing detergent since it can cause dishwashing machines to malfunction. Third, the chemical makeup of hand dishwashing detergents and liquid automatic dishwashing detergents is different. The predominant ingredients in hand dishwashing detergents are high foaming anionic surfactants. In contrast, liquid automatic dishwashing detergents typically contain low levels of nonionic surfactants or amphoteric surfactants and are generally free of anionic surfactants. Fourth, common commercial products are labeled to avoid the machine use of hand dishwashing detergents and the hand use of liquid automatic dishwashing detergents. For example, major manufacturers of hand dishwashing detergents in North America are Procter & Gamble (Ultra Dawn[®]), Colgate-Palmolive (Ultra Palmolive[®]), and Unilever (Ultra Sunlight[®]). Each of these hand dishwashing products has a label cautioning the users against use in a dishwashing machine:

Ultra Dawn [®]	"Not for use in dishwashers."
Ultra Palmolive [®]	"Do not use in automatic dishwashers."
Ultra Sunlight [®]	"Not for use in automatic dishwashers."

Major manufacturers of liquid or gel automatic dishwashing detergents in North America are Procter & Gamble (Cascade[®]), Colgate-Palmolive (Palmolive[®] Gel), Unilever (Sunlight[®] Gel), and Reckitt Benckiser (Electrosol[®] Gel). Each of these liquid or gel automatic dishwashing detergents has a label cautioning the users against hand dishwashing use:

Cascade® "Do not mix with dishwashing liquids. Do not get on skin or clothing. Not for hand dishwashing."

Palmolive® Gel "Avoid contact with mouth, eyes and skin. Do not use for hand dishwashing."

Sunlight® Gel "Not for hand dishwashing. Do not mix with hand dishwashing liquids."

Electrosol® Gel "Avoid contact with skin, eyes, mucous membranes and clothing. Do not use for hand dishwashing."

Given the substantial differences between hand dishwashing detergents and liquid automatic dishwashing detergents, a person experienced in the detergent field would be able to distinguish hand dishwashing detergents from liquid automatic dishwashing detergents.

7. The Ospinal *et al.* patent does not relate to liquid automatic dishwashing detergents as evidenced by the following. First, the Ospinal *et al.* patent repeatedly discloses that the invention relates to "mild personal cleansing and/or laundry detergent bars." See, e.g., the Abstract; col. 1, lines 7-9; col. 2, lines 64-66; and col. 3, lines 46-48. Mild is a term rarely, if ever, used in connection with liquid automatic dishwashing detergents. As stated above, major manufacturers of liquid automatic dishwashing detergents warn users not to come in contact with their liquid automatic dishwashing detergents. The background section of the Ospinal *et al.* patent, however, repeatedly uses the term mild to describe a property of detergents designed to contact skin. For example, the first two paragraphs of the Description of Related Art states:

Mild personal cleansing and laundry cleaning bar preparations have become a focus of great interest. People wash and exfoliate their skin with various surface-active detergent bar formulations several times a day. Ideal skin cleanser bars should cleanse the skin gently, causing little or no irritation, without defatting and over-drying the skin or leaving it taut after frequent routine use. Most lathering soap bars fail in this respect.

The processability of such bars and their precursor detergent compositions has also become a focus of great interest. The mildness, processability,

firmness and smear properties of such bars have become a focus of even greater interest.

In addition, the section from column 2, line 66 to column 3, line 3 of the Ospinal *et al.* patent states that the compositions are "mild to the skin" and have "good lathering properties." The Ospinal *et al.* patent also discusses the inclusion of "skin-feel" ingredients (e.g., skin softening and/or moisturizing agents). See, e.g., col. 16, lines 19-21. Second, the main ingredients in the compositions described in the Ospinal *et al.* patent are anionic surfactants. In some cases, as much as 99% of the composition can be an anionic surfactant. See, e.g., col. 3, lines 47-51; col. 4, lines 33-36; and col. 5, lines 14-17. Anionic surfactants, particularly at such high levels, are not used to make liquid automatic dishwashing detergents. As explained in Surfactants in Consumer Products,

Due to the intensive mechanical input by water the generally strongly foaming anionic surfactants cannot be used in DWM [dishwashing machines]. In contrast to manual dishwashing, where high levels of foam are definitely desired and even utilized as a criteria for the product evaluation (see Sect. 5.2.1), foaming is unwanted in a DWM because it leads to diminished pumping action as well as to a noticeable reduction in the cleaning efficiency.

* * *

However, nonionic surfactants are preferred for applications in DWM detergents and rinse aids due to their phase behavior, which varies from that of other surfactants.

Page 324 of Surfactants in Consumer Products, J. Falbe (Ed.) Springer-Verlag Heidelberg, 1987.

Given the properties and ingredients described throughout the Ospinal *et al.* patent, a person experienced in the detergent field would appreciate that the Ospinal *et al.* patent does not relate to liquid automatic dishwashing detergents.

8. I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both, under Section 1001 of Title

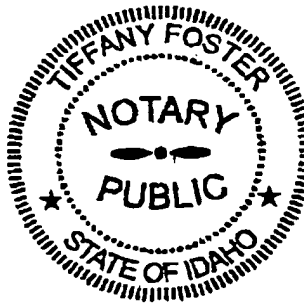
Attorney's D cket No.: 09143-012001

18 of the United States Code and that such willful false statements may jeopardize the validity of the instant patent application or any patent issuing thereon.

Dated: 7-24-03
James L. Kurtz

STATE OF Idaho)
) ss.
COUNTY OF Bonneville)

Before me this 24th day of July, 2003, personally appeared James L. Kurtz known to me to be the person whose name is subscribed to the foregoing Declaration, and acknowledged that he executed the same as his free act and deed for the purposes therein contained.


Notary Public

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